

## **5075, North Lawrence Com Schools**

### **PROJECT ABSTRACT**

North Lawrence Community Schools (NLCS) has several digital projects that are shovel ready. They will result in more students receiving 1:1 digital support, more opportunities to complete and demonstrate learning digitally, and provide professional development for teachers. The goals of this grant proposal are to target four elementary schools that did not meet AYP and to expand the second grade laptop program at one elementary school. This will be achieved by creating new learning environments that will focus on sound instructional planning and project-based learning through effective use of technology to meet standards, increase achievement, and equip all students with 21st century skills. Using instructional technology to transform classrooms will motivate and engage students in active learning. NLCS is ready to build the infrastructure for a wireless LAN to increase wireless access to expand learning opportunities throughout the buildings.

Our goal will focus on improving reading and math skills at the elementary level by giving the schools the necessary equipment to use the curriculum tools they already have in place. The technology will allow the teachers the tools necessary to use all the digital content that comes with the materials they presently use and web resources such as Thinkfinity and PearsonSuccessNet. We are also piloting Envision Math from Pearson that has shown great success especially when used with the necessary hardware.

Stalker, Lincoln, Heltonville and Fayetteville Elementary Schools will be transformed into 21st Century classrooms with daily access to LCD projectors, interactive whiteboards, document cameras, and student response systems. Acquiring these technologies will greatly benefit instruction and support in strengthening their curriculum.

Professional development will provide teachers with the skills necessary to use the LCD projectors, interactive whiteboards, document cameras, and student response systems. In addition teachers will learn to use instructional strategies that can be utilized from assessments resources such as Wireless Generation, Acuity, STAR Reading and STAR Math. Instructional coaches will train and model instructional best practices.

Dollens Elementary participated in the 2nd grade laptop pilot and would like to expand that project into the 3rd grade classroom.

A partnership between NLCS and Southwest Dubois County Schools (SWDCS) will mutually benefit both corporations. This partnership will allow our administrators, teachers and staff to participate in sustained, on-going collaboration to ensure that the tools and techniques provided through this project continue to lead to increased academic student achievement.

St. Vincent Depaul will also be participating and would like to begin implementing laptops in their school to increase student achievement.

### **NEEDS/BASELINE**

NLCS has more than forty percent poverty level and 4 elementary schools (Stalker, Lincoln, Fayetteville, and Heltonville) missing AYP targets in the free and reduced lunch categories and/or special education.

Dollens Elementary met all AYP categories and we will be expanding their existing 1:1 2nd grade laptop project to include 3rd grade.

Southwest Dubois has two elementary schools Huntingburg and Holland.

Huntingburg Elementary

School Improvement: Focus School-Year 4

Free/reduced Lunch - 53% and growing

Hispanic Enrollment: 21% ( Note: 80% of our Hispanics are on Free/Reduced Lunch)

Subgroups Not Making AYP:

Hispanic: Math

Limited Proficient: Math & Eng/La

Holland Elementary is a small school making AYP

NLCS and SWDCS want to provide all of our schools with the same tools and resources to have alignment across the curriculum and district.

## **GOALS/OBJECTIVES**

Scores in each AYP category will increase by three percent in the areas of math and reading for all four schools involved. By transforming classrooms into 21st Century classrooms we will be giving the teachers the necessary tools to provide instruction that is more engaging and motivating for students. Teachers and courses will use LCD projectors, interactive whiteboards, document cameras, and student response systems to maximize student engagement and increase academic achievement in the classroom.

Teachers will learn project-based approaches and understand how to integrate technology into all areas of the curriculum to meet state academic and technology standards. Professional development will be delivered through Intel Teach. This research-proven program will help teachers enhance 21st century learning through the effective use of technology. Teachers will learn from other teachers how, when and where to incorporate technology into their lesson plans, with a focus on developing students' higher-order thinking skills. They will experience new approaches to create assessment tools and align lessons with educational learning goals and state standards.

Implementation of the wireless LAN project in the school buildings will increase student achievement by allowing more access to network resources.

Moodle will give students more access to course materials and opportunities to interact with the teacher.

Moodle: Students will learn by doing and sharing with Moodle. Its tools will allow students to work together to construct their own knowledge, making learning a much more personal and relevant experience. Moodle will allow teachers to teach in a blended environment where students have 24/7 access to the online components of the class. Students will have opportunities to work cooperatively and collaborate with other students in their school, other schools in their district, partner schools, and across the country.

## **METHODS/ACTIVITIES**

Our projects are shovel-ready that involve getting the hardware, software, testing, network, and professional development activities underway so teachers begin changing instruction to match student learning needs.

1. Installation of wireless access in all NLCS buildings results in more computers connecting to on-line resources. This allows computers to be shared and used in any room, increasing the 1-1 contact for students.

2. New lap-tops, Smart Boards, LCD projectors, and Student Response Systems will allow teachers to use and create digital lessons and assessments. Tools from Smart Technology are getting rave reviews from NLCS teaches, as they have elsewhere, for getting students involved. Teachers in schools not making AYP or teaching subjects or levels that involve significant numbers of students who are not passing ISTEP must agree to the training and will have priority for hardware purchases. We will train teachers with similar new technology.

3. Data will be used to determine what will be taught using the RTI model of instruction. Students who have mastered skills will move forward in small groups. Students who have not mastered language, math, problem solving, and science skills will be taught using varied instructional strategies. Digital tools will bring lessons to life in new formats using internet resources. Students who do not show mastery in tier 2 will receive additional help in small groups. Tier 4 is more individualized and will be worked out as needed. Research tells us cooperative groups positively impact learning more than the textbooks or computer systems. Thus, we will focus teacher training on five components of effective cooperative groups: Positive Interdependence, Group and Individual Accountability, Face to Face Interaction, Interpersonal Skills, and Group Processing.

4. Using Moodle will revitalize instruction and learning for many teachers and students.. Textbooks now have enormous on-line supports. These are often interactive components for the text. There are videos, audio vocabulary, internet links, and interactive self-assessments. For a sample, see [www.phschool.com](http://www.phschool.com), from our middle school math textbooks. NCTM, NSTA, and NCTE all have many wonderful digital lesson plans and activities. There is a very extensive library of interactive instructional activities developed by Smart Technologies and others for the interactive white boards and hand-held student response systems. As we provide teachers with hardware, easier internet access, and training, we will be providing needed support that will result in new ways to teach that better fits the learning styles of our cell phone toting, IPOD listening students.

## SWDCS

We're going to use teleconferencing gear throughout our district to peer teach and to take the resources that are in our current 2nd grade classrooms and expand that knowledge to another school. At the high school level we're going to take our knowledge of Moodle and expand that our elementary schools. Our tech trainer is located at a fourth school that will be participating in the professional development process also. We will use the teleconferencing gear to facilitate the professional development and to expand into the Intel Teach project-based learning model. We will also integrate with our host school, which currently has teleconferencing equipment. We will help that partner school in facilitating classroom integrations of Airliners/Mobis, Skype, and project-based learning pedagogies.

We are expanding our current 1:1 classrooms to use project-based learning. We are also adding 3rd grade to our already successful 1:1 2nd grade and high school English classrooms, in addition to adding a second elementary school setup for 2nd and 3rd grade classrooms. This will give our school corporation a cohesive learning environment. By integrating project-based learning pedagogies we are driving the curriculum to use technology, not technology defining the curriculum

## **PROFESSIONAL DEVELOPMENT**

Professional Development Activities for staff to understand and use those tools provided to them (i.e. Lap-tops, Smart Boards, LCD projectors, Student Response Systems, and Moodle) will be held done in a variety of ways including workshops during the school day, after school sessions, summer workshops, and distance learning activities between NLCS and SWDCS.

These trainings will follow a Trainer-of Trainer model. The staff members that attend these sessions will be trained to turn-key the content to additional school and corporation staff. This will allow for technology "leaders" in each school participating, which in turn will provide ongoing professional development to their school staff.

SWDCS will use the teleconferencing gear to facilitate the professional development and to expand into the Intel Teach project-based learning model. We will also integrate with our host school, which currently has teleconferencing equipment. We will help that partner school in facilitating classroom integrations of Airliners/Mobis, Skype, and project-based learning pedagogies.

Our goal is to provide professional development that will help teachers meet the needs of all students. Based on analysis of student data, staff development activities will be selected and designed to allow staff to understand and meet a variety of student needs. Opportunities will be provided for all staff to participate in ongoing development activities to improve classroom instruction and help teachers meet our RTI model of classroom instruction through a true hybrid approach to classroom instruction. We expect our staff to be fully trained and all technology in place by the end of the 2009/10 school year. We expect to see three percent gains in ISTEP scores at the end of the 2010/11 school year. A professional development plan and training calendar will be created in January 2010. Professional Development activities will begin at the end of Jan 2009 and continue throughout the 2010-11 school year.

## **FORMATIVE/SUMMATIVE EVALUATION**

Proof of progress will include the following documentations:

1. Attendance documents for all professional development.
2. Testing reports developed and used by teachers to guide lesson development.
3. Electronic lesson plans developed using tools such as Moodle.
4. Satisfaction surveys will be given to parents, students, and staff.
5. Assessments of student learning using ISTEP, Acuity, and other teacher or local tests.

The greatest measure of success would be a definitive reduction in the number of NLCS schools not meeting AYP criteria and a higher percentage of students at every grade level in every school passing ISTEP. When a program begins to have those kinds of success, it will be easier to get more teachers committed to the methods and program that begets that kind of success, making the project self-sufficient for the long term

## **LOCAL MATCH**

\$35,000

NLCS will contribute \$35000.00 to help fund this project. Local funds that have been appropriated to Technology Capital Projects and e-rate reimbursements will be used to help with the purchase of wireless networking equipment, document cameras, and Ipod Itouch hand held computers.

## **PARTNERSHIPS**

A partnership between NLCS and Southwest Dubois County Schools (SWDCS) will mutually benefit both corporations.

SWDCS is a part of the 2nd grade laptop grant and will collaborate with Dollens Elementary School to help with the integration and expansion of the project to 3rd grade.

This laptop program has already tremendously increased student engagement, motivation and achievement, teachers are very eager to expand the program to other grades. We have to build the program from grade to grade in order for students to sustain the knowledge and skills they have acquired.

There is a strong home-school connection parent component to the laptop program that the partnership will continue to strengthen and grow.

The success of this partnership will be shared with both communities through school and district websites, as well as the local news media.

SWDCS expertise with the use of Moodle will also be a part of this partnership that will help NLCS with the K-12 roll out of Moodle

NLCS will help SWDCS with the use of Polycom Equipment.

SWDCS expertise with the use of interactive whiteboards, LCD projectors and student response systems will be very beneficial to the NLCS partnership

SWDCS/Southridge High School 3 years experience of 1:1 computing/8 Labs that include Special Ed--- Alternative Learning Hybrid Lab. As NLCS gets closer in implementing 1:1 computing the experience of SWDCS will greatly benefit NLCS in rolling out a 1:1 environment.